0072723

SAF-RC-073
100-D/DR Burial Grounds & Remaining Sites – Other Solid Quick Turn
FINAL DATA PACKAGE

COMPLETE COPY OF DATA PACKAGE TO:

Jeanette Duncan	H4-21	KW 4/12/07 INITIAL/DATE

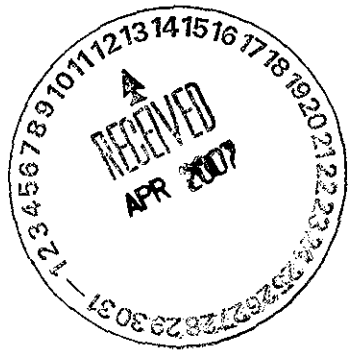
COMMENTS:

SDG J00107 **SAF-RC-073**

Rad only X Chem only Rad & Chem

X Complete Partial

Waste Site: Parking lot concrete



Analytical Data Package Prepared For

Washington Closure Hanford

Radiochemical Analysis By

STL Richland

2800 G.W. Way, Richland Wa, 99354, (509)-375-3131.

Assigned Laboratory Code: STLRL

Data Package Contains 20 *Pages*

Report No.: 34943

SDG No.	Order No.	Client Sample ID (List Order)	Lot-Sa No.	Work Order	Report DB ID	Batch No.
J00107	RC-073	J15008	J7D090189-1	JTK7W1AA	9JTK7W10	7100233

SEVERN TRENT STL

STL Richland
2800 George Washington Way
Richland, WA 99354

Tel: 509 375 3131 Fax: 509 375 5590
www.stl-inc.com

Certificate of Analysis

Washington Hanford Closure
2620 Fermi Avenue
Richland, WA 99354

April 12, 2007

Attention: Joan Kessner

SAF Number	:	RC-073
Date SDG Closed	:	April 9, 2007
Number of Samples	:	One (1)
Sample Type	:	Other Solid
SDG Number	:	J00107
Data Deliverable	:	7 -Day / Summary

CASE NARRATIVE

I. Introduction

On April 9, 2007, one other solid sample was received at STL Richland (STLR) for chemistry analysis. Upon receipt, the sample was assigned the following laboratory ID number to correspond with the Washington Closure Hanford (WCH) specific ID:

WCH ID#	STLR ID#	MATRIX	DATE OF RECEIPT
J15008	JTK7W	OTHER SOLID	4/09/07

II. Sample Receipt

The sample was received in good condition and no anomalies were noted during check-in.

III. Analytical Results/Methodology

The analytical results for this report are presented by laboratory sample ID. Each set of data includes sample identification information, analytical results and the appropriate associated statistical errors. The requested analyses were:

Chemical Analysis
Hexavalent Chromium by EPA method 7196A

IV. Quality Control

The analytical results for each analysis performed includes a minimum of one laboratory control sample (LCS), one method (reagent) blank, and one duplicate sample analysis. Any exceptions have been noted in the "Comments" section.

QC and sample results are reported in the same units.

V. Comments

Chemical Analysis

Hexavalent Chromium by EPA method 7196A:

The matrix spike and insoluble matrix spike were out of specification due to the extremely high amount of Cr+6 present in sample J15008 and due to the highly inhomogeneous nature of the sample. Sample J15008 was a concrete sample with streaks of yellow-green material veined through it. As a result of the sample inhomogenity the duplicate (J15008) and the sample (J15008) also did not agree. Except as noted, the LCS, batch blank, sample and sample duplicate (J15008) results are within contractual requirements.

I certify that this Certificate of Analysis is in compliance with the SOW, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the Laboratory Manager, or a designee as verified by the following signature.

Reviewed and approved:

Sandra Seger
Project Manager

Drinking Water Method Cross References

	DRINKING WATER ASTM METHOD CROSS REFERENCES	
Referenced Method	**Isotope(s)**	**STL Richland's SOP number**
EPA 901.1	Cs-134, I-131	RICH-RC-5017
EPA 900.0	Alpha & Beta	RICH-RC-5014
EPA 903.1	Ra-226	RICH-RC-5005
EPA 904.0	Ra-228	RICH-RC-5005
EPA 905.0	Sr89/90	RICH-RC-5006
ASTM D2460	Total Radium	RICH-RC-5027
Standard Method 7500-U-C & ASTM D5174	Uranium	RICH-RC-5058
EPA 906.0	Tritium	RICH-RC-5007
NOTE:		
The Gross Alpha LCS is prepared with Am-241 (unless otherwise specified in the case narrative)		
The Gross Beta LCS is prepared with Sr/Y-90 (unless otherwise specified in the case narrative)		

Uncertainty Estimation

STL Richland has adopted the internationally accepted approach to estimating uncertainties described in "NIST Technical Note 1297, 1994 Edition". The approach, "Law of Propagation of Errors", involves the identification of all variables in an analytical method which are used to derive a result. These variables are related to the analytical result (R) by some functional relationship, R = constants * f(x,y,z,...). The components (x,y,z) are evaluated to determine their contribution to the overall method uncertainty. The individual component uncertainties (u_i) are then combined using a statistical model that provides the most probable overall uncertainty value. All component uncertainties are categorized as type A, evaluated by statistical methods, or type B, evaluated by other means. Uncertainties not included in the components, such as sample homogeneity, are combined with the component uncertainty as the square root of the sum-of-the-squares of the individual uncertainties. The uncertainty associated with the derived result is the combined uncertainty (u_c) multiplied by the coverage factor (1,2, or 3).

When three or more sample replicates are used to derive the analytical result, the type A uncertainty is the standard deviation of the mean value (S/vn), where S is the standard deviation of the derived results. The type B uncertainties are all other random or non-random components that are not included in the standard deviation.

The derivation of the general "Law of Propagation of Errors" equations and specific example are available on request.

Report Definitions

Action Lev	An agreed upon activity level used to trigger some action when the final result is greater than or equal to the Action Level. Often the Action Level is related to the Decision Limit.
Batch	The QC preparation batch number that relates laboratory samples to QC samples that were prepared and analyzed together.
Bias	Defined by the equation (Result/Expected)-1 as defined by ANSI N13.30.
COC No	Chain of Custody Number assigned by the Client or STL Richland.
Count Error (#s)	Poisson counting statistics of the gross sample count and background. The uncertainty is absolute and in the same units as the result. For Liquid Scintillation Counting (LSC) the batch blank count is the background.
Total Uncert (#s) u_c *- Combined Uncertainty.*	All known uncertainties associated with the preparation and analysis of the sample are propagated to give a measure of the uncertainty associated with the result, u_c *the combined uncertainty.* The uncertainty is absolute and in the same units as the result.
(#s), Coverage Factor	The coverage factor defines the width of the confidence interval, 1, 2 or 3 standard deviations.
CRDL (RL)	Contractual Required Detection Limit as defined in the Client's Statement Of Work or STL Richland "default" nominal detection limit. Often referred to the reporting level (RL)
Lc	Decision Level based on instrument background or blank, adjusted by the Efficiency, Chemical Yield, and Volume associated with the sample. The Type I error probability is approximately 5%. Lc=(1.645 * Sqrt(2*(BkgrndCnt/BkgrndCntMin)/SCntMin)) * (ConvFct/(Eff*Yld*Abn*Vol) * IngrFct). For LSC methods the batch blank is used as a measure of the background variability. Lc cannot be calculated when the background count is zero.
Lot-Sample No	The number assigned by the LIMS software to track samples received on the same day for a given client. The sample number is a sequential number assigned to each sample in the Lot.
MDC|MDA	Detection Level based on instrument background or blank, adjusted by the Efficiency, Chemical Yield, and Volume with a Type I and II error probability of approximately 5%. MDC = (4.65 * Sqrt((BkgrndCnt/BkgrndCntMin)/SCntMin) + 2.71/SCntMin) * (ConvFct/(Eff * Yld * Abn * Vol) * IngrFct). For LSC methods the batch blank is used as a measure of the background variability.
Primary Detector	The instrument identifier associated with the analysis of the sample aliquot.
Ratio U-234/U-238	The U-234 result divided by the U-238 result. The U-234/U-238 ratio for natural uranium in NIST SRM 4321C is 1.038.
Rst/MDC	Ratio of the Result to the MDC. A value greater than 1 may indicate activity above background at a high level of confidence. Caution should be used when applying this factor and it should be used in concert with the qualifiers associated with the result.
Rst/TotUcert	Ratio of the Result to the Total Uncertainty. If the uncertainty has a coverage factor of 2 a value greater than 1 may indicate activity above background at approximately the 95% level of confidence assuming a two-sided confidence interval. Caution should be used when applying this factor and it should be used in concert with the qualifiers associated with the result.
Report DB No	Sample Identifier used by the report system. The number is based upon the first five digits of the **Work Order** Number.
RER	The equation Replicate Error Ratio = (S-D)/[sqrt($TPUs^2$ + $TPUd^2$)] as defined by ICPT BOA where S is the original sample result, D is the result of the duplicate, TPUs is the total uncertainty of the original sample and TPUd is the total uncertainty of the duplicate sample.
SDG	Sample Delivery Group Number assigned by the Client or assigned by STL Richland upon sample receipt.
Sum Rpt Alpha Spec Rst(s)	The sum of the reported alpha spec results for tests derived from the same sample excluding duplicate result where the results are in the same units.
Work Order	The LIMS software assign test specific identifier.
Yield	The recovery of the tracer added to the sample such as Pu-242 used to trace a Pu-239/40 method.

Sample Results Summary

Date: 12-Apr-07

STL Richland STLRL

Ordered by Client Sample ID, Batch No.

Report No. : 34943 **SDG No:** J00107

Client ID	Work Order Number	Parameter	Result +- Uncertainty (2s)	Qual	Units	Yield	MDC|MDA	RPD
J15008	JTK7W1AA	HEXCHROME	2.25E+02 +- 0.00E+00		mg/kg	N/A	3.50E-01	
	JTK7W1AE	HEXCHROME	4.58E+02 +- 0.00E+00		mg/kg	N/A	3.50E-01	68.4

Number of Results: 2

STL Richland **RPD** - Relative Percent Difference.

rptSTLRchSaSum
V5.1 A2002

QC Results Summary

STL Richland STLRL

Ordered by QC Type, Batch No.

Date: 12-Apr-07

Report No. : 34943

SDG No.: J00107

QC Type	Work Order Number	Parameter	Result +- Uncertainty (2s)	Qual	Units	Yield	Recovery	Bias	MDC|MDA
MATRIX SPIK	JTK7W1AC	HEXCHROME	8.70E-01 +- 0.00E+00		mg/kg	N/A	8%	-0.9	3.50E-01
LCS	JTL6M1AC	HEXCHROME	1.73E+01 +- 0.00E+00		mg/kg	N/A	87%	-0.1	3.50E-01
BLANK QC	JTL6M1AA	HEXCHROME	3.50E-01 +- 0.00E+00	N	mg/kg	N/A			3.50E-01

Number of Results: 3

STL Richland **Bias** -(Result/Expected)-1 as defined by ANSI N13.30.

rptSTLRchQcSum
V5.1 A2002

FORM I

SAMPLE RESULTS

Date: 12-Apr-07

Lab Name:	**STL Richland**	**SDG:**	J00107	**Collection Date:**	4/9/2007 9:22:00 AM
Lot-Sample No.:	**J7D090189-1**	**Report No. :**	34943	**Received Date:**	4/9/2007 3:07:00 PM
Client Sample ID:	**J15008**	**COC No. :**	RC-073-008	**Matrix:**	OTHERSOLI

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Analy Method, Primary Detector
Batch: 7100233	**Work Order:** JTK7W1AA			**Report DB ID:** 9JTK7W10								
HEXCHROME	***2.25E+02***			0.0E+00	3.50E-01	mg/kg	N/A	*(641.9)*	4/9/07		2.5	7196_CR6
							3.50E-01	*N/A*			G	

Number of Results: 1

Comments:

FORM I

SAMPLE RESULTS

Date: 12-Apr-07

Lab Name:	STL Richland	**SDG:**	J00107	**Collection Date:**	4/9/2007 9:22:00 AM
Lot-Sample No.:	J7D090189-1	**Report No. :**	34943	**Received Date:**	4/9/2007 3:07:00 PM
Client Sample ID:	J15008	**COC No. :**	RC-073-008	**Matrix:**	OTHERSOLI

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Analy Method, Primary Detector

FORM II

Date: 12-Apr-07

DUPLICATE RESULTS

Lab Name:	STL Richland	**SDG:**	J00107	**Collection Date:**	4/9/2007 9:22:00 AM
Lot-Sample No.:	J7D090189-1	**Report No. :**	34943	**Received Date:**	4/9/2007 3:07:00 PM
Client Sample ID:	J15008	**COC No. :**	RC-073-008	**Matrix:**	OTHERSOLI

Parameter	Result, Orig Rst	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, CRDL	Yield	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Analy Method, Primary Detector
Batch: 7100233	**Work Order:** JTK7W1AE			**Report DB ID:** JTK7W1ER		**Orig Sa DB ID:** 9JTK7W10						
HEXCHROME	4.58E+02			0.0E+00	3.50E-01	mg/kg	N/A	(1308.5)	4/9/07		2.5	7196_CR6
	2.25E+02	RPD	68.4			3.50E-01		N/A			G	

Number of Results: 1

Comments:

RPD - Relative Percent Difference.

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.

FORM II

BLANK RESULTS

Date: 12-Apr-07

Lab Name: STL Richland **SDG:** J00107

Lot-Sample No.: #Error **Report No. :** 34943 **Matrix:** OTHERSOLID

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA ,	Rpt Unit, CRDL	Yield	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Analy Method, Primary Detector
Batch: 7100233	Work Order: JTL6M1AA			Report DB ID: JTL6M1AB								
HEXCHROME	3.50E-01	N		0.0E+00	3.50E-01	mg/kg	N/A	(1.)	4/9/07		2.5	7196_CR6
						3.50E-01		N/A			G	

Number of Results: 1

Comments:

STL RICHLAND

FORM II

LCS RESULTS

Date: 12-Apr-07

Lab Name: STL Richland **SDG:** J00107

Lot-Sample No.: #Error **Report No. :** 34943 **Matrix:** OTHERSOLID

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA	Report Unit	Yield	Expected	Expected Uncert	Recovery, Bias	Analysis, Prep Date	Aliquot Size	Analy Method, Primary Detector
Batch: 7100233	Work Order: JTL6M1AC			Report DB ID: JTL6M1AS									
HEXCHROME	1.73E+01			0.0E+00	3.50E-01	mg/kg	N/A	2.00E+01		87%	4/9/07	2.5	7196_CR6
							Rec Limits:	80.	120.	-0.1		G	

Number of Results: 1

Comments:

12

STL RICHLAND

FORM II

MATRIX SPIKE RESULTS

Date: 12-Apr-07

Lab Name: STL Richland **SDG:** J00107

Lot-Sample No.: J7D090189-1 **Report No. :** 34943 **Matrix:** OTHERSOLI

Parameter	SpikeResult, Orig Rst	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA	Rpt Unit, CRDL	Yield	Rec-overy	Exp-ected	Exp Uncert	Analysis, Prep Date	Aliquot Size	Analy Method, Primary Detector
Batch: 7100233	Work Order: JTK7W1AC			Report DB ID: JTK7W1CW			Orig Sa DB ID: 9JTK7W10						
HEXCHROME	8.70E-01			0.0E+00	3.50E-01	mg/kg	N/A	8.50%	1.02E+01		4/9/07	2.5	7196_CR6
	2.25E+02											G	

Number of Results: 1

Comments:

13

STL Richland
rptSTLRchMs V5.1
A2002

RER - Replicate Error Ratio = (S-D)/[sqrt(sq(TPUs)+sq(TPUd))] as defined by ICPT BOA.
Bias - (Result/Expected)-1 as defined by ANSI N13.30.

SEVERN TRENT STL

Richland Laboratory
Data Review Check List
Hexavalent Chromium

Work Order Number(s): **JR1LJ, JRWJD**
Lab Sample Numbers or SDG: **J00106**
Method/Test/Parameter: **Cr+6 in SOLID / RICH-WC-5003, Rev 7**

Review Item	Yes (✓)	No (✓)	N/A (✓)	2nd Level Review (✓)
A. Initial Calibration				
1. Performed at required frequency with required number of levels?	✓			✓
2. Correlation coefficient within QC limits?	✓			✓
3. Initial calibration verification (ICV) analyzed immediately after calibration and results within QC limits?	✓			✓
4. Initial calibration blank (ICB) analyzed immediately after ICV and concentrations of all parameters ≤ reporting limit?	✓			✓
B. Continuing Calibration				
1. CCV analyzed at required frequency and all parameters within QC limits?	✓			✓
2. CCB analyzed at required frequency and all results ≤ reporting limit?	✓			✓
C. Sample Analysis	✓			
1. Were any samples with concentrations above the linear range for any parameter diluted and reanalyzed?				✓
2. Were all sample holding times met?	✓			✓
D. QC Samples				
1. All results for the preparation blank below limits?	✓			✓
2. MS or MS/MSD recoveries within QC limits and %RPD (for MSD) acceptable?		✓		✓
3. LCS percent recovery within QC limits and %RPD (for LCSD) acceptable?	✓			✓
4. Analytical spikes within QC limits where applicable?			✓	✓
5. ICP only: One serial dilution performed per SDG?			✓	✓
6. ICP only: CRDL standard (CRI or CRA) analyzed at required frequency?			✓	✓
7. ICP only: Interference check samples (ICSA, ICSAB) and HICAL analyzed at the required frequencies and within QC limits?			✓	✓

Review Item	Yes (✓)	No (✓)	N/A (✓)	2nd Level Review (✓)
E. Other	✓			
1. Are all nonconformances included and noted?				✓
2. Is the correct date and time of analysis shown?	✓			✓
3. Did the analyst sign and date the front page of the analytical run?	✓			✓
4. Correct methodology used?	✓			✓
5. Transcriptions checked?	✓			✓
6. Calculations checked at minimum frequency?	✓			✓
7. Units checked?	✓			✓

Comments on any "No" response _____ MS and insoluble MS recoveries were overpowered by the large amount of Cr+6 present in the samples and also due to the extreme inhomogeneous nature of the sample. See NCM _____

Analyst: _____ Date: 4/10/07

Second-Level Review: _____ Date: 4/11/07

Clouseau
Nonconformance Memo

SEVERN TRENT SERVICES

NCM #: **10-09703**
NCM Initiated By: Steven Wheland
Date Opened: 04/10/2007
Date Closed:

Classification: **Anomaly**
Status: **GLREVIEW**
Production Area: Classical Chemistry
Tests: 7196A
Lot #'s (Sample #'s): J7D090189 (1), J7D100000 (233),
QC Batches: 7100233

Nonconformance: QC data exceeded criteria
Subcategory: MS/MSD accuracy and/or precision out of control

Problem Description / Root Cause

Name	Date	Description
Steven Wheland	04/10/2007	MS and insoluble MS were out of specification due to the extremely high amount of Cr+6 present in the samples and due to the highly inhomogeneous nature of the sample. The sample was a concrete sample with streaks of yell-green material viened through it. As a result of the sample inhomogenity the duplicate and the sample also did not match.

Corrective Action

Name	Date	Corrective Action
Steven Wheland	04/10/2007	Report data.

Client Notification Summary

Client	Project Manager	Notified	Response	How Notified	Note
	Response	Response Note			

Quality Assurance Verification

Verified By	Due Date	Status	Notes
		This section not yet completed by QA.	

Approval History

Date Approved	Approved By	Position

Date Printed: 4/10/2007

J7D090189 ~~J000707~~ Rush Due 04-16-07

Washington Closure Hanford	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		RC-073-008	Page 1 of 1
Collector D.W.Shea JD107	Company Contact D.W.Shea	Telephone No. 521-6014	Project Coordinator KESSNER, JH	Price Code / Data Turnaround
Project Designation 100-D/DR Burial Grounds & Remaining Sites - Other Solid	Sampling Location parking lot concrete		SAF No. RC-073	
Ice Chest No.	Field Logbook No. EL-1607-1	COA R11DX12000	Method of Shipment Company Vehicle	
Shipped To Severn Trent Incorporated, Richland	Offsite Property No.		Bill of Lading/Air Bill No.	

POSSIBLE SAMPLE HAZARDS/REMARKS

Cr+6

Special Handling and/or Storage

Preservation	Cool 4C										
Type of Container	G/P										
No. of Container(s)	1										
Volume	60mL										
SAMPLE ANALYSIS	Chromium Hex - 7196										
Sample No.	Matrix *	Sample Date	Sample Time								
J15008	OTHER SOLID	4/9/07	0922	V			JTK7W				

CHAIN OF POSSESSION	Sign/Print Names		
Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
DWShea DWShea	4/9/07 1507	[signature]	4/9/07 1507
Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time

SPECIAL INSTRUCTIONS

Sample more heavily stained areas for Cr+6

Matrix *
S=Soil
SE=Sediment
SO=Solid
SL=Sludge
W = Water
O=Oil
A=Air
DS=Drum Solids
DL=Drum Liquids
T=Tissue
WI=Wipe
L=Liquid
Ve=Vegetation
X=Other

LABORATORY SECTION	Received By	Title	Date/Time
FINAL SAMPLE DISPOSITION	Disposal Method	Disposed By	Date/Time

WCH-EE-011

STL RICHLAND

17

SEVERN TRENT STL

Sample Check-in List

Date/Time Received: 4/9/07 1507

Client: WCH SDG # J00107 RC073

Work Order Number: J7D090189 Chain of Custody # RC-073-008

Shipping Container ID: _____ Air Bill # _____

1. Custody Seals on shipping container intact? ✓
2. Custody Seals dated and signed? ✓
3. Chain of Custody record present? ✓
4. Cooler temperature _____ NA ✓ Temperature blank ✓
6. Number of samples in shipping container: 1
7. Sample holding times exceeded? ✓
8. Samples have:
   _____tape
   _____custody seals
9. Samples are:
   ✓ in good condition
   _____broken
10. Sample pH taken? NA ✓ pH<2 [ ] pH>2 [ ] (Daby 4/9/07 1507)
11. Sample Location, Sample Collector Listed? * ✓
    *For documentation only. No corrective action needed
12. Were any anomalies identified in sample receipt? ✓
13. Description of anomalies (include sample numbers):

Sample Custodian: Ev Daby Date 4/9/07 1507

Client Sample ID	Analysis Requested	Condition

Client Informed on _____ by _____

[ ] No action necessary; process as is.

Project Manager _____ Date _____

LS-023, 12/05, Rev 6

STL RICHLAND

4/10/2007 10:37:10 AM

Sample Preparation/Analysis

Balance Id:

127642, Washington Closure Hanford
Bechtel Hanford, Inc.

DW Alkaline Digestion by method 3060A
EA Chromium, Hexavalent (7196A)

Pipet #:

AnalyDueDate: 04/10/2007

5I CLIENT: HANFORD

Sep1 DT/Tm Tech:

Batch: 7100233 **OTHER SOILD** **mg/kg**

PM, Quote: SS , 27038

Sep2 DT/Tm Tech:

SEQ Batch, Test: None All Tests: DWEA, 7100233 DWEA,

Prep Tech:

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:

1 JTK7W-1-AA

J7D090189-1-SAMP

04/09/2007 09:22 AmtRec: JAR60G #Containers: 1 Scr: Alpha: Beta:

2 JTK7W-1-AC-S

J7D090189-1-MS

04/09/2007 09:22 AmtRec: JAR60G #Containers: 1 Scr: Alpha: Beta:

3 JTK7W-1-AD-D

J7D090189-1-MSD

04/09/2007 09:22 AmtRec: JAR60G #Containers: 1 Scr: Alpha: Beta:

4 JTK7W-1-AE-X

J7D090189-1-DUP

04/09/2007 09:22 AmtRec: JAR60G #Containers: 1 Scr: Alpha: Beta:

5 JTL6M-1-AA-B

J7D100000-233-BLK

04/09/2007 09:22 AmtRec: #Containers: 1 Scr: Alpha: Beta:

6 JTL6M-1-AC-C

J7D100000-233-LCS

04/09/2007 09:22 AmtRec: #Containers: 1 Scr: Alpha: Beta:

4/10/2007 10:37:17 AM

Sample Preparation/Analysis

DW Alkaline Digestion by method 3060A
EA Chromium, Hexavalent (7196A)
5I CLIENT: HANFORD

Balance Id:

Pipet #: _____

AnalyDueDate: 04/10/2007

Sep1 DT/Tm Tech:

Batch: 7100233 mg/kg

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech:

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:

Comments:

All Clients for Batch:
127642, Washington Closure Hanford Bechtel Hanford, Inc. , SS , 27038

JTK7W1AA-SAMP Constituent List:
HEXCHROME RDL:0.35 mg/kg LCL:80 UCL:120 RPD:20
JTK7W1AC-MS Constituent List:
HEXCHROME RDL:0.35 mg/kg LCL:75 UCL:125 RPD:20
JTK7W1AD-MSD:
HEXCHROME RDL:0.35 mg/kg LCL:75 UCL:125 RPD:20
JTL6M1AA-BLK:
HEXCHROME RDL:0.35 mg/kg LCL: UCL: RPD:
JTL6M1AC-LCS:
HEXCHROME RDL:0.35 mg/kg LCL:80 UCL:120 RPD:20

JTK7W1AA-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JTK7W1AC-MS Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JTK7W1AD-MSD:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JTL6M1AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JTL6M1AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By _____ Date: _____